



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,550	07/17/2000	Tetsuo Taniguchi	194378US2CONT	9489

22850 7590 11/29/2002

OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC
FOURTH FLOOR
1755 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VA 22202

EXAMINER

NGUYEN, HUNG

ART UNIT	PAPER NUMBER
----------	--------------

2851

DATE MAILED: 11/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,550

Applicant(s)

TANIGUCHI

Examiner

Hung Henry V Nguyen

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 26-42 and 49-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 43-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Prosecution Status

1. This office action is non-final since the Examiner has changed the art and advanced new arguments.

Claim Rejections-35 USC 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-25, 43-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1 and the recitation of “adjusting an image forming characteristic...in consideration of a stored image distortion correction capability of a second exposure apparatus which is different from said first exposure apparatus” is ambiguous and not clearly understood. The breadth, scope and meaning of “image distortion correction capability of a second exposure apparatus which is different from said first exposure apparatus” is indefinite and not clearly understood.

As to claim 6, the recitation of “adjusting an image forming characteristic of said second exposure apparatus, in consideration of an image distortion that can not be sufficient corrected by said first exposure apparatus” is not clearly understood. The meaning of “an image distortion that can not be sufficient corrected by said first exposure apparatus” is vague and indefinite.

Art Unit: 2851

As to claim 7, the meaning of “adjusting an image...said second exposure apparatus” is not clearly defined and indefinite.

As to claim 10, the meaning of “in accordance with stored information on an image distortion correction capability of said second exposure apparatus” is indefinite.

As to claim 12, the meaning of “so as to leave an image distortion that can be corrected by said second exposure apparatus” is not clearly understood.

As to claim 15, the recitation of “adjusting an image...said first exposure apparatus” is ambiguous and not clearly understood.

As to claim 22, it is not clearly understood what “an image distortion component which difficult or impossible to be corrected by said other exposure apparatus” the applicant refers to? For the purpose of expediting prosecution, the rejected claims are being interpreted in light of the specification under following art rejections.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

Art Unit: 2851

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-25, 43-48 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ushida et al (U.S.Pat. 4,734,746).

With regard to claims 1-25, 43-48, Ushida et al (fig.1) discloses an exposure method and apparatus using a plurality of exposure apparatuses (A and B) for exposing patterns of a plurality of layers on a substrate (see col.6, lines 1-3) comprising all of the limitations of the instant claims including: the data DS₂ regarding the distortion of the projection lens (PL₂) of the exposure B is stored in the main control device (CNT₂) and is sent to the main control device (CNT₁) or the main control device (CNT₂) of the exposure B receives distortion data of the exposure A so that the image forming characteristic of a first/or second exposure apparatus is adjusted based on the stored image forming characteristic of a second/or first exposure apparatus (see col.6, lines 10-41; col.7, lines 1 through col.10, line 62).

6. Claims 1-25, 43-48 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Okamoto et al (U.S.Pat. 6,163,336).

With regard to claims 1-25, 43-48, Okamoto et al (fig.1) discloses an exposure method and apparatus comprising all of the basic features of the instant claims including the distortion data of each exposure unit has been known and stored in the memory of a main controller system (6). Accordingly, the image forming characteristic of one exposure apparatus in a plurality of exposure apparatuses is adjusted to expose one layer of the substrate based on the stored image distortion capability of another exposure apparatus (see abstract of Okamoto, for example).

Art Unit: 2851

Prior Art Made of Record

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawakubo et al (U.S.Pat. 5,989,761) and Nakashima (U.S.Pat. 6,281,965) discloses exposure apparatus and method using a plurality of exposure units, each of which comprises substantially all of the limitations of the instant invention as claimed.

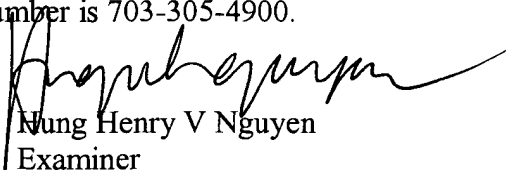
Response to Amendment

8. Applicant's amendments filed August 21, 2002 and September 11, 2002 have been entered. Applicant's arguments with respect to the prior art have been carefully reviewed but have been traversed in view of new grounds of rejections as set forth above.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 703-305-6462. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.


Hung Henry V Nguyen
Examiner
Art Unit 2851

hvn
November 25, 2002